

WHAT IS CLAIMED IS:-

1. A cartridge for a digital photofinishing system having a digital
5 processor and a printer arranged to receive drive signals from the digital
processor; the cartridge being arranged to be mounted removably in
juxtaposition to the printer and comprising a source of printing fluid to be
delivered on demand to the printer, and the cartridge incorporating means
for coupling with a print media feed drive mechanism.

10 2. A cartridge as claimed in claim 1 removably mounted to a digital
photofinishing system in which the digital processor is arranged to receive
digitised data that is representative of a photographic image and to process
the data in a manner to generate a printer drive signal that is
15 representative of the photographic image, the printer being coupled to the
digital processor and being arranged to process the drive signal and effect
page-width printing of the photographic image on the print media.

20 3. A cartridge as claimed in claim 1 and incorporating a replaceable roll
of print media.

4. A cartridge as claimed in claim 2 wherein the roll of print media is
removably mounted to a tubular core of the cartridge and wherein the
source of printing fluid comprises at least one refillable container that is
25 removably located within the tubular core.

5. A cartridge as claimed in claim 2 wherein the digital processor is
arranged to receive said digitised data from an input source selected from
a scanning device, a computer disk, a digital camera output, a digital
30 camera memory card, a digital file and an internet connection.

6. A cartridge as claimed in claim 2 wherein said digitised data is input to the digital processor as a standardised image compression signal and processed as JPEG files.

5 7. A cartridge as claimed in claim 2 wherein the printer comprises at least one print head assembly.

8. A cartridge as claimed in claim 2 wherein the printer comprises two confronting, spaced-apart print head assemblies.

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9. A cartridge as claimed in claim 8 wherein the print head assemblies are arranged selectively to direct printing fluid onto at least one face of print media from the roll of print media.

15 10. A cartridge as claimed in claim 8 wherein each print head assembly comprises at least one print head module, each of which comprises a unitary arrangement of:

a) a support member,

20 b) at least four micro-electromechanical integrated circuit print head chips, each of which has a plurality of nozzles to and from which the printing fluid is delivered,

c) a fluid distribution arrangement mounting each of the print head chips to the support member, and

25 d) a connector for connecting electrical power and signals to each of the print head chips.

11. A cartridge as claimed in claim 10 wherein the at least one print head module is removably located in a channel portion of a casing and wherein the casing contains electrical circuitry for controlling delivery of
30 electrical power and drive signals to the print head chips by way of the connector.

12. A cartridge as claimed in claim 2 wherein a drier means is located in series with the printer, the drier means being arranged to receive printed media directly from the printer and comprising:

5 a) guide rollers for transporting the print media through the drier means, and

b) at least one blower arranged to direct drying air onto at least one face of print media as it is transported through the dryer means.

10 13. A cartridge as claimed in claim 2 wherein a slitter means is located in series with the printer, the slitter means being arranged to receive printed media following its passage through the printer, to transport the printed media in a longitudinal direction away from the printer and to slit the printed media In the longitudinal direction of transportation of the printed media.

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14. A cartridge as claimed in claim 13 wherein the slitter means comprises:

a) guide rollers for transporting the print media through the slitter means,

20 b) spaced-apart slitting blades mounted on rotatable shafts, and

c) a rotatable, selectively positional turret supporting the rotatable shafts.

25 15. A cartridge as claimed in claim 13 wherein a guillotine is mounted to the slitter means, the guillotine being selectively actuatable to cut the print media at selected intervals.

30 16. A cartridge as claimed in claim 2 wherein the processor and the printer are mounted to a support structure and wherein the cartridge is removably mounted to the support structure.

17. A cartridge as claimed in claim 16 wherein the support structure includes a compartment and the cartridge is removably located in the compartment.

5 18. A cartridge as claimed in claim 16 wherein print media feed means are located in the cartridge and drive means are provided on the support structure and are arranged to couple with the feed means to effect feeding of the print media through the printer when the primary cartridge is mounted to the support structure.

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19. A cartridge as claimed in claim 17 wherein a paper feed drive mechanism is mounted to the compartment and is arranged to engage a said roll of the print media.

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20. A cartridge as claimed in claim 19 wherein a door is provided in a wall portion of the cartridge and wherein the door is arranged to be opened to enable the paper feed drive mechanism to engage the roll of print media.

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21. A cartridge as claimed in claim 20 wherein the paper feed drive mechanism comprises a pivotal carrier, a first drive motor arranged to impart pivotal drive to the carrier, a primary drive roller mounted to the carrier and arranged to engage the roll of print media when the door in the primary cartridge is open, and a second drive motor arranged to impart rotary drive to the primary roller.

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23. A cartridge as claimed in claim 18 wherein the print media feed means include a drive roller and a pinch roller, and wherein the drive means comprises a third drive motor which is mounted to the support structure.

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